The American Centrifuge

USEC is deploying the American Centrifuge, a gas centrifuge uranium enrichment technology, to replace the gaseous diffusion process used at its Paducah plant.

USEC's American Centrifuge technology has its foundations in U.S. centrifuge technology, a proven, workable technology developed by the U.S. Department of Energy (DOE) over a 20-year period through 1985. USEC licenses this technology from DOE.

USEC has significantly updated and improved the original DOE centrifuge technology through the use of high-performance materials, advanced computer-aided design, analytic modeling tools, improved equipment design and rotor balancing, highly accurate digital controls and computer-aided manufacturing processes to a performance parameters while meeting exacting tolerances.

Centrifuge Testing and Development

Demonstration and manufacturing activities are underway at several fa Ridge, Tennessee. USEC initiated testing of centrifuge components in testing individual prototype machines in highly specialized test equipme

In 2006, the USEC project team at Oak Ridge tested a centrifuge machine that demonstrated performance of about 350 separative work units (SWU) per machine per year. This performance level has been reaffirmed in subsequent testing.

In 2007, USEC's project team froze the design of this prototype centrifuge machine, which is now operating in the Lead Cascade.

In March 2008, USEC finalized the initial design for the AC100 machine to be used in the commercial plant and released 75 percent of the drawings to its strategic suppliers to begin manufacturing components. Additional component validation testing will be completed and the remaining drawings released to the strategic suppliers by the end of June. The AC100 is designed to produce 350 SWU per year.

Lead Cascade Test Program

In Piketon, Ohio, USEC is operating the American Centrifuge Demonst purposes of demonstrating and evaluating the Company's enhancemer technology and centrifuge performance in a cascade configuration.

The Lead Cascade test program began operating in the Demonstration 2007 using the prototype centrifuge machines. Tests have demonstrate the American Centrifuge technology to produce low enriched uranium a assay levels.

Licensing

The NRC issued the Construction and Operating License for the Ameri in April 2007. The license, which is valid for 30 years, includes authoriz uranium up to an assay level of 10 percent U^{235}.

American Centrifuge Plant

USEC officially began construction on the American Centrifuge Plant in May 2007. USEC is working toward beginning commercial plant operations in late 2009 and having approximately 11,500 machines deployed in 2012, which would provide about 3.8 million SWU of production based on current estimates of machine output and plant availability. As part of USEC's review of the American Centrifuge Plant costs, USEC is also looking at the plant's deployment schedule.

The successful construction and operation of the American Centrifuge upon a number of factors, including the success and timing of the demo deployment of the American Centrifuge technology, the costs to develo and the Company's success in obtaining financing for the plant.